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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,809	01/29/2001	Glenn G. Amatucci	15884-54	7825

7590 11/02/2005

DOCKET ADMINISTRATOR
LOWENSTEIN SANDLER PC
65 LIVINGSTON AVENUE
ROSELAND, NJ 07068-1791

EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,809

Applicant(s)

AMATUCCI, GLENN G.

Examiner

Julian Mercado

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

This Office action is responsive to applicant's amendment filed August 22, 2005.

This Office action presents a new ground of rejection and is therefore made NON-FINAL.

Claim Objections

The objection to claim 8 has been withdrawn.

Claim Rejections - 35 USC § 102 and 103

The rejection of claims 8-11 under 35 U.S.C. 102(e) or under 35 U.S.C. 103(a) based on Striebel et al. (U.S. Pat. 6,165,641) has been withdrawn.

The examiner acquiesces with applicant's assertion that lithium titanium disulfide (LiTiS_2) as taught by Striebel et al. is not readable on the claimed lithium titanate. Applicant's remarks that this compound was mentioned in the "background" section of the disclosure is also acknowledged.

(new rejection)

Claims 8- 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamawaki et al. (U.S. Pat. 6,475,673 B1).

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As to claims 8, 10 and 11, Yamawaki et al. teaches a lithium ion battery having a lithium titanate compound, $\text{Li}_4\text{Ti}_5\text{O}_{12}$, with a particle size “in the range of 0.1 to 15 μm ...” See col. 1 line 8 et seq. and line 48 et seq. and col. 4 lines 14-21. By “in the range of 0.1” μm (which is equal to 100 nm), particle sizes below 100 nm are considered taught by Yamawaki et al., e.g. particle sizes of 98 nm and 99 nm are in the range of 100 nm. Additionally, while Yamawaki et al. may express a preferred particle size range of 300 nm to 10 μm or 500 nm to 5 μm , at the same time the patentees provide motivation for the skilled artisan to focus on particle sizes in the range of 100 nm and to explore particle sizes below that range.

Claim 9 recites product-by-process limitations of heating, holding and cooling of a mixture, *inter alia*, to obtain the instant lithium titanate intercalation compound. However, these process limitations have not given patentable weight as the limitations do not give breadth or scope to the product claim. The claimed product appears to be the same or similar to the prior art product insofar as being a lithium intercalation battery active material having a particle size of less than 100 nm. In the event that any differences can be shown by the product of the product-by-process claim 9, such differences would have been obvious to the skilled artisan as a routine modification of the product absent of a showing of unexpected results. *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985).

Applicant's arguments have been fully considered, however they are not found persuasive. To the extent that applicant's arguments for claim 9 may be applicable towards the present ground of rejection, applicant submits advantages of the present invention which is allegedly absent in the prior art. While the examiner is fully aware of applicant's disclosure from paragraph [0007] of the specification, applicant is reminded that differences in the instant

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product *as compared to that of the prior art* and a showing of *unexpected results as compared to the prior art* must be shown to obviate the present ground of rejection. (emphasis added)

Assertions of what is already disclosed in the specification cannot take place of evidence in the record; such assertions are not the kind of factual evidence that is required to rebut a *prima facie* case of obviousness in the rejection of the product-by-process claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. 5,919,588 to Jose et al. is cited to teach a lithium titanate compound having a particle size of 100 nm. See col. 3 line 42 et seq.

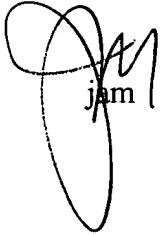
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



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PATRICK JOSEPH RYAN
SUPERVISORY